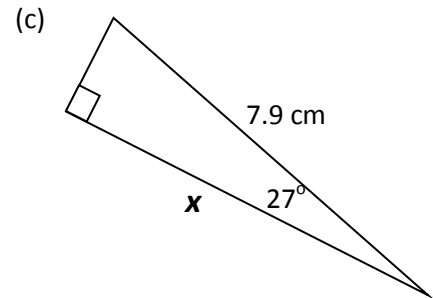
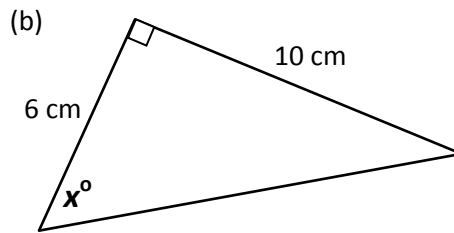
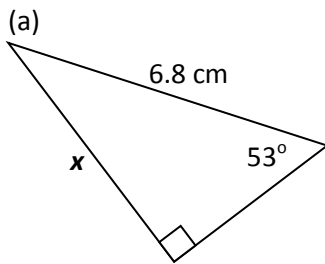
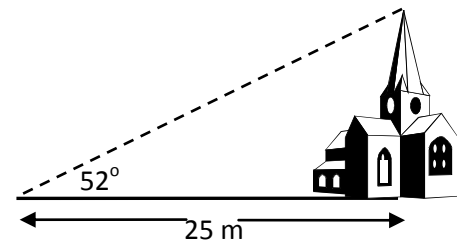


## Homework – Trigonometry

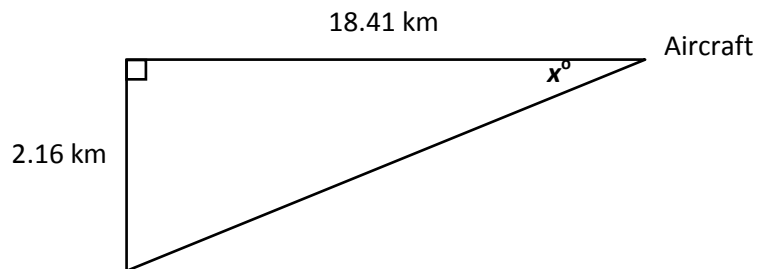
1. Calculate  $x$  in each diagram below:



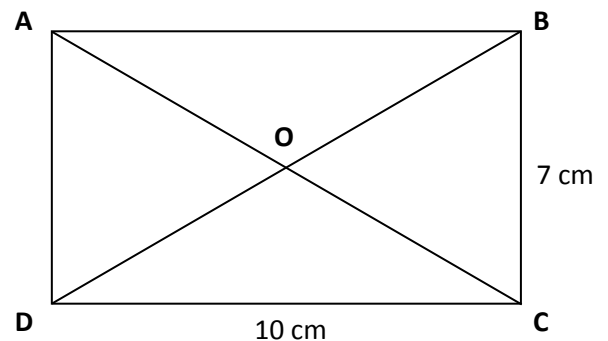
2. Jenny is standing 25 metres away from the bottom of a church tower. She looks up at the top at an angle of elevation of  $52^\circ$ . Calculate the height of the tower.



3. An aircraft making a steady descent decreases height by 2.16 km in 18.41 km. What is the angle of descent,  $x^\circ$ ?



4. The sides of a rectangle are 10 cm and 7 cm long. Calculate the sizes of angle AOB, the obtuse angle between the diagonals of the rectangle.



5. Eric and Ernie are both very bad golfers. Eric is at G and aiming for the pin, P, which is straight ahead of him. Unfortunately, he hits the ball  $25^\circ$  to the right and it lands 110 metres away at Q. Ernie is also aiming for the pin but he hits his ball  $10^\circ$  further to the right and it lands at R, a distance of 122 metres. Calculate the distance between the balls at Q and R.

